

AMENDMENT UNDER 37 C.F.R. § 1.114(c)  
U.S. APPLICATION NO. 09/587,909  
ATTORNEY DOCKET NO. Q59049

**REMARKS**

Claims 1-17 have been examined on their merits.

Applicants herein add new claims 18-20, which are supported by the originally filed specification and claims. Entry and consideration of the new claims 18-20 is respectfully requested.

Claims 1-20 are all the claims presently pending in the application.

1. Claim 1 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* (U.S. Patent No. 5,715,521) in view of Pandula (U.S. Patent No. 5,299,236). Applicants traverse the § 103(a) rejection of claim 1 for at least the reasons discussed below.

The combination of Fukasawa *et al.* and Pandula fail to teach or suggest at least several of the features of amended claim 1. First of all, the combination of Fukasawa *et al.* and Pandula fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an information signal during an initial synchronization period. Fukasawa *et al.* disclose, *inter alia*, a procedure of sending a synchronizing signal at one power level, and, upon synchronization, lowering the power level of the synchronizing signal. Once synchronization is achieved, both the synchronizing signal and the data signal are transmitted together. *See* Fig. 2; col. 3, line 57-col. 4, line 60 of Fukasawa *et al.* Pandula discloses, *inter alia*, that synchronization must be accomplished prior to data transmission, and that synchronization is maintained by embedding by using a synchronization pattern embedded in the data transmission. *See, e.g.*, col. 10, lines 48-61 of Pandula. Neither reference teaches or suggests transmitting the acquisition signal

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simultaneously with the information signal during the initial synchronization period, as both references are quite clear that initial synchronization is performed without payload data being transmitted during the initial synchronization.

Second, the combination of Fukasawa *et al.* and Pandula fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited in amended claim 1. Neither Pandula nor Fukasawa *et al.* teaches or suggests anything about the relative length of the codes used, and the Patent Office has admitted as much.

Thus, Applicants submit that the combination of Fukasawa *et al.* and Pandula does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula, since neither reference teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.* and Pandula does not fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembicza*k, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

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Based on at least the foregoing reasons, Applicants submit that claim 1 is allowable over the combination of Fukasawa *et al.* and Pandula, and respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 1.

2. Claims 2, 3, 5, 8, 10, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* in view of Pandula and further in view of Skinner *et al.* (U.S. Patent No. 5,577,025). Applicants traverse the § 103(a) rejection of claims 2, 3, 5, 8, 10, 16 and 17 for at least the reasons discussed below.

Skinner *et al.* discloses, *inter alia*, signal acquisition in a multi-user communication system using multiple Walsh channels. Skinner *et al.* further disclose a pseudorandom noise generator 38 providing a pseudorandom noise code sequence to a despreader 40 to despread signal components that are output as a series of I and Q channel chips.

The combination of Fukasawa *et al.*, Pandula and Skinner *et al.* fail to teach or suggest at least several of the features of amended claim 2. First, the combination of Fukasawa *et al.*, Pandula and Skinner *et al.* fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an information signal during an initial synchronization period. The deficiencies of Fukasawa *et al.* and Pandula with respect to this feature have already been discussed above with respect to claim 1. Skinner *et al.* provides no additional disclosure that overcomes the deficiencies of Fukasawa *et al.* and Pandula. Second, the combination of Fukasawa *et al.*, Pandula and Skinner *et al.* fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited

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in amended claim 2. Neither Pandula, Fukasawa *et al.* nor Skinner *et al.* teaches or suggests anything about the relative length of the codes used.

Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula and Skinner *et al.* does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula and Skinner *et al.*, since none of the references teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula and Skinner *et al.* does not fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Based on at least the foregoing reasons, Applicants submit that claim 2 is in condition for allowance over the combination of Fukasawa *et al.*, Pandula and Skinner *et al.*, and further submit that claims 5 and 8 are allowable as well, at least by virtue of their dependency from claim 2. Applicants request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 2, 5 and 8.

With respect to amended independent claim 3, Applicants submit that claim 3 is allowable over the combination of Fukasawa *et al.*, Pandula and Skinner *et al.* for at least reasons analogous to those discussed above for claim 2. Applicants further submit that claims 10 and 16

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are allowable as well, at least by virtue of their dependency from claim 3. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 3, 10 and 16.

With respect to amended independent claim 17, Applicants submit that claim 17 is allowable over the combination of Fukasawa *et al.*, Pandula and Skinner *et al.* for at least reasons analogous to those discussed above for claim 2. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 17. Applicants also submit that new claims 18-20 are allowable, at least by virtue of their dependency from claim 17.

3. Claim 4 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* in view of Pandula and further in view of Schilling *et al.* (U.S. Patent No. 6,061,359). Applicants traverse the § 103(a) rejection of claim 4 for at least the reasons discussed below.

Schilling *et al.* disclose, *inter alia*, a packet spread-spectrum system, in which a chip sequence generator 39 provides a chip sequence to a first plurality of product devices 51, 52 and 58 to produce a first plurality of spread-spectrum channels, and to a second plurality of product devices 151, 152, and 158 to produce a second plurality of spread-spectrum channels.

The combination of Fukasawa *et al.*, Pandula and Schilling *et al.* fail to teach or suggest at least several of the features of claim 4, which includes via dependency all the recitations of amended claim 1. First, the combination of Fukasawa *et al.*, Pandula and Schilling *et al.* fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an

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information signal during an initial synchronization period. The deficiencies of Fukasawa *et al.* and Pandula with respect to this feature have already been discussed above with respect to claim 1. Schilling *et al.* provides no additional disclosure that overcomes the deficiencies of Fukasawa *et al.* and Pandula. Second, the combination of Fukasawa *et al.*, Pandula and Schilling *et al.* fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited in amended claim 1. Neither Pandula, Fukasawa *et al.* nor Schilling *et al.* teaches or suggests anything about the relative length of the codes used.

Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula and Schilling *et al.* does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula and Schilling *et al.*, since none of the references teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula and Schilling *et al.* does not fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembicza*k, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Based on at least the foregoing reasons, Applicants submit that claim 4 is in condition for allowance over the combination of Fukasawa *et al.*, Pandula and Schilling *et al.* Applicants request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 4.

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4. Claims 6 and 11-13 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* in view of Pandula and further in view of Skinner *et al.* and Schilling *et al.* Applicants traverse the § 103(a) rejection of claims 6 and 11-13 for at least the reasons discussed below.

The combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* fail to teach or suggest at least several of the features of claims 6, 11 and 13, which include via dependency all the recitations of amended claim 2. As discussed above, the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an information signal during an initial synchronization period. Second, as discussed above, the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited in amended claim 2, and incorporated via dependency in claims 6, 11 and 13. Neither Pandula, Fukasawa *et al.*, Schilling *et al.* nor Skinner *et al.* teaches or suggests anything about the relative length of the codes used.

Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula, Skinner *et al.* and Schilling *et al.*, since none of the

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references teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* does not fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembicza*k, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Based on at least the foregoing reasons, Applicants submit that claims 6, 11 and 13 are in condition for allowance over the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* Applicants request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 6, 11 and 13.

With respect to claim 12, which depends from amended independent claim 3, Applicants submit that claim 12 is allowable over the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Schilling *et al.* for at least reasons analogous to those discussed above for claims 6, 11 and 13. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 12.

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5. Claim 7 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* in view of Pandula and further in view of Ozluturk *et al.* (U.S. Patent No. 5,841,768). Applicants traverse the § 103(a) rejection of claim 7 for at least the reasons discussed below.

The combination of Fukasawa *et al.*, Pandula and Ozluturk *et al.* fail to teach or suggest at least several of the features of claim 7, which includes via dependency all the recitations of amended claim 1. First, the combination of Fukasawa *et al.*, Pandula and Ozluturk *et al.* fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an information signal during an initial synchronization period. The deficiencies of Fukasawa *et al.* and Pandula with respect to this feature have already been discussed above with respect to claim 1. Ozluturk *et al.* provides no additional disclosure that overcomes the deficiencies of Fukasawa *et al.* and Pandula. Second, the combination of Fukasawa *et al.*, Pandula and Ozluturk *et al.* fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited in amended claim 1 and included via dependency in claim 7. Neither Pandula nor Fukasawa *et al.* teaches or suggests anything about the relative length of the codes used, and the Patent Office has admitted as much. Although the Patent Office argues that Ozluturk *et al.* disclose short acquisition codes, those short codes are not being transmitted at the same time as the encoded information signal during an initial synchronization time.

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Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula and Ozluturk *et al.* does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula and Ozluturk *et al.*, since none of the references teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula and Ozluturk *et al.* does not fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Based on at least the foregoing reasons, Applicants submit that claim 7 is in condition for allowance over the combination of Fukasawa *et al.*, Pandula and Ozluturk *et al.* Applicants request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 7.

6. Claims 14 and 15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* in view of Pandula and further in view of Skinner *et al.* and Ozluturk *et al.* Applicants traverse the § 103(a) rejection of claims 14 and 15 for at least the reasons discussed below.

The combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* fail to teach or suggest at least several of the features of claim 14, which includes via dependency all

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the recitations of amended claim 2. First, the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an information signal during an initial synchronization period. Second, the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited in amended claim 2 and included via dependency in claim 14. Neither Pandula, Fukasawa *et al.* nor Skinner *et al.* teaches or suggests anything about the relative length of the codes used, and the Patent Office has admitted as much. Although the Patent Office argues that Ozluturk *et al.* disclose short acquisition codes, those short codes are not being transmitted at the same time as the encoded information signal during an initial synchronization time.

Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula, Skinner *et al.* and Ozluturk *et al.*, since none of the references teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* does not

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fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

Based on at least the foregoing reasons, Applicants submit that claim 14 is in condition for allowance over the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* Applicants request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 14.

With respect to claim 15, which depends from amended independent claim 3, Applicants submit that claim 15 is allowable over the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Ozluturk *et al.* for at least reasons analogous to those discussed above for claim 14. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 15.

7. Claim 9 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fukasawa *et al.* in view of Pandula and further in view of Skinner *et al.* and Cheng (U.S. Patent No. 5,563,883). Applicants traverse the § 103(a) rejection of claim 9 for at least the reasons discussed below.

Cheng discloses, *inter alia*, a method for channel management and signaling, in which the forward and reverse signaling data channels are coupled in different mappings to support terminal grouping.

The combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Cheng fail to teach or suggest at least several of the features of claim 9, which includes via dependency all the

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recitations of amended claim 3. As discussed above, the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Cheng fails to teach or suggest at least the transmission of an acquisition signal simultaneously with an information signal during an initial synchronization period. Second, the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Cheng fails to teach or suggest at least that the length of the acquisition code is shorter than the CDMA code for encoding the information signal, as recited in amended claim 3, which is incorporated via dependency in claim 9. Neither Pandula, Fukasawa *et al.*, Schilling *et al.* nor Cheng teaches or suggests anything about the relative length of the codes used.

Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Cheng does not fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required under *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Applicants also submit that one of ordinary skill in the art would not be motivated to combine Fukasawa *et al.* with Pandula, Skinner *et al.* and Cheng, since none of the references teaches or suggests the simultaneous transmission of acquisition and information signals during an initial synchronization time, or teaches or suggests that the acquisition code is shorter than the CDMA code used for encoding an information signal. Thus, Applicants submit that the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Cheng does not fulfill the motivation prong of a *prima facie* case of obviousness, as required under *In re Dembicza*k, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

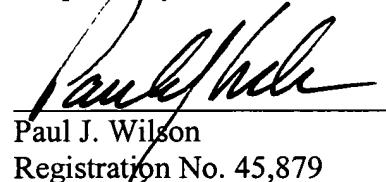
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Based on at least the foregoing reasons, Applicants submit that claim 9 is in condition for allowance over the combination of Fukasawa *et al.*, Pandula, Skinner *et al.* and Cheng. Applicants respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claim 9.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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